

Collecting Butterflies in Denmark

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In the following account I shall try to give a survey of the butterflies you might be able to find in Denmark.

Denmark covers an area of some 43,000 square km. and consists of Jutland, which is connected with Germany to the south; Seeland, with the capital Copenhagen; and Funen, Lolland-Falster and Bornholm in the Baltic between Sweden and Germany. Furthermore, there are a lot of small islands. The country is situated between the 58th and 55th degrees of latitude, and the climate is temperate, with a mean 0° celsius in winter and 16° in summer. The temperature rarely sinks to more than 10° below 0° and rises very rarely over 30°, although in the summer of 1975, the temperature rose to 36° in August.

Denmark is a very flat country, and nowhere does the land rise to more than 400 ft. above sea level. The country is intensively cultivated, except for some areas in western Jutland, and the northern part of Bornholm, which is the only place you can find rocks. 10% of Denmark is covered by woods, in the east by beech and in the west, spruce.

Denmark is very poorly supplied with Rhopalocera — only 93 species have been found here. The only Papilionid to be found in Denmark is *Papilio machaon* L., whose distribution is now very local. You might be able to catch the butterfly in south-west Jutland, but it is a rare species and now declining. The only Parnassid which has been resident in Denmark, *Parnassius mnemosyne* L., is now extinct; its last locality was a wood in Jaegerpris in northern Seeland, where it has not been seen for several years. *P. apollo* L. which is local in Sweden, has occasionally been blown over from there, but it cannot establish itself in Denmark.

We have 11 species of Pieridae, of which the commonest are *Pieris napi* L., *P. rapae* L. and *P. brassicae* L. These three are distributed all over the country. *Leptidea sinapis* L., which is a rare species, is only to be found in Bornholm, in Almindingen in May. *Anthocharis cardamines* L. is common in woods all over the country in May and June. *Pontia daplidice* L. is a very rare species in Denmark; you might be able to catch this butterfly on Bornholm, or in Jutland, but several years may go between the capture of this delicate insect. The Hawthorn butterfly, *Aporia crataegi* L., the biggest of the whites, flies locally in central and southern Jutland; it has also been found in Seeland where it is now extinct. We have three *Colias* species: *C. palaeno* L. is extremely rare, and only found on a few moors in Jutland and Seeland, in July. *C. hyale* L. and *C. crocea* Geoffroy immigrate in spring from the south, and give rise to an indigenous brood in August-September, but it is not every year you can catch these two species. *C. hyale* is the easier to get, while *C. crocea* is very scarce. *Gonopteryx rhamni* L. is

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common all over the country in August-September, and again after hibernation in April-May.

The family Nymphalidae consists of 27 species. We have recorded two *Limenitis*. The big *L. populi* L., which has been found in Lolland, but is now extinct, and the smaller *L. camilla* L., which can be found in several woods over the country. *Apatura iris* L. is growing more numerous year by year, and is mainly distributed on Bornholm, but also occurs on Lolland-Falster and Seeland.

Five Melitaeinae have been recorded. Two *Euphydryas* species, though *E. maturna* L. has only been taken once in 1890, whereas *E. aurinia* Rott. is not uncommon in northern Jutland, but is now extinct in Seeland. We have three *Melitaea* species flying in June, of which *M. cinxia* L. is generally distributed, *M. diamina* Lang is caught on the islands, but not in Jutland, and *M. athalia* Rott. is local in Jutland, Seeland and Lolland.

We have nine Argynniinae in Denmark. *Boloria aquilonaris* Stichel is found in July, where bogs with quagmire are present. *Clossiana selene* D. & S. is common throughout in woods in June. *C. euphrosyne* L. is hardly so common and mostly found in South Seeland. *Brenthis ino* Rott. occurs on moors in July, but only on the islands, not in Jutland, and is not common. *Issoria lathonia* L. is common on poor soil all over the country. The larger fritillaries are: *Fabriciana adippe* L., which is not uncommon in woods on Seeland, but rather rare in Jutland. *F. niobe* L. occurs in July, in northern Jutland and North Seeland and is rather common. *Mesoacidalia aglaja* L. is common throughout the country in July and August. *Argynnis paphia* L. is rather common in woods, all over the country.

There are ten Vanessinae in Denmark. *Araschnia levana* L. like *Apatura iris* is growing more numerous year by year, and is distributed in South Denmark in two broods, in May and again in August. *Vanessa cardui* L. and *V. atalanta* L. are rather common and widespread. *Polygonia c-album* L. is rare and local on Seeland and Bornholm in August-September and again after hibernation in April-May. *Nymphalis l-album* Esp. has only been taken a few times in Denmark and is a rare immigrant from the east. *N. polychloros* L. is now declining in Denmark, and is mostly taken in Seeland and on Bornholm. *N. xanthomelas* Esp. is a rare immigrant from the east, and has only occurred a few times on Bornholm. *N. antiopa* L. is distributed all over the country, but is not common, though most frequent in Northern Seeland and on Bornholm. *Inachis io* L. and *Aglais urticae* L. are well distributed and often very common.

Fifteen Satyridae have been recorded, six of which are non-resident, as follows: *Lopinga achine* Scop. and *Lasiommata maera* L. are both distributed in Sweden and South Europe; *Lasiommata petropolitana* Fab., distributed in the Alps and in Fennoscandia; *Melanargia galathea* L., distributed in Central Europe; *Erebia ligea* L. distributed in Sweden and in the Alps, and *Pyronia tithonus* L. in Central and Southern Europe. Resi-

dent species are: *Lasiommata megera* L., rather common all over the country in May-June and in August. *Coenonympha hero* L. is found in a very small area in South Seeland, where it is often common; and *C. arcania* L. is rather common in June-July in a few oak woods near the city of Viborg in Northern Jutland. *C. tullia* Müller, which is a very local species, occurs in meadows in Jutland, Funen and Seeland. *C. pamphilus* L. is distributed throughout the country and is often numerous. Also numerous and generally distributed are *Aphantopus hyperantus* L. and *Maniola jurtina* L. *Hipparchia semele* L. is common everywhere in Denmark on sandy soil in July and August.

The family Riodinidae is represented by *Hamearis lucina* L., an extremely local butterfly that has not been caught in Denmark for several years. It was only found in one small wood in Seeland, where it is perhaps now extinct.

The family Lycaeninae is represented by 19 species. We have six coppers, of which *Heodes alciphron* Rott. is not resident, and has only been recorded twice from the island of Falster, having possibly been blown over from Germany. *H. virgaureae* L. is rather common on meagre soil all over Denmark (except on the island of Funen); whereas *H. tityrus* Poda can only be found at Svanninge Bakker on Funen, though some years ago it was taken on Seeland but is probably now extinct there. The largest copper, *Lycaena dispar* ssp. *rutilus* Werneburg, was not discovered in Denmark until 1934, in one locality on the island of Falster, but we have not seen it for 12 years and it is now considered to be extinct. By contrast, *L. phlaeas* L. is common everywhere. *Palaeochrysophanus hippothoe* L. was once very common on moors, but is now declining owing to drainage, but can still be found on several moors, particularly on Seeland.

We have 13 blues in Denmark. *Celastrina argiolus* L. is found on moors in many parts in May and June and sometimes in August as a partial second brood, but the species is now declining. *Cupido minimus* L. is widely distributed but very local. *Glaucopsyche alexis* Poda has only occurred once as a single specimen, at Roden skov Lollan in 1957, but I think it likely this species will be taken again. *Maculinea arion* L., which is a rather rare butterfly with us, is found in the northern parts of Seeland, on Bornholm and in Jutland but is most frequent on the island of Moen. *M.alcon* D. & S. is only to be found in North and Southern Jutland, and on the island of Laesoe where it is rather common. *Lycaeides idas* L. and *Plebejus argus* L. fly in July-August and are rather common on meagre soil; *P. argus* L. occurs mainly in Northern Seeland, in Jutland and on Bornholm. *Aricia agestis* D. & S. is locally distributed throughout Denmark in May-June and July-August. *A. artaxerxes* F. is rather numerous in July-August, but is limited in its distribution to three places: Tornby in Vendsyssel (Jutland), Roervig (Northseeland) and Hammeren (Bornholm). *Cyaniris semiargus* Rott. is distributed throughout Jutland and also occurs in Northseeland and on Bornholm, but is only common in Jutland. *Vacciniiana optilete* Knoch is a rare and very local species

found only on a few quagmire moors in different parts of the country, including a few in Northseeland. *Polyommatus icarus* Rott., our commonest blue, is generally distributed. *Lysandra amanda* Schn. is locally distributed and moderately common in Jutland, south of the inlet Limfjorden, and on Seeland and Funen, but is absent from Bornholm.

Six members of the subfamily Theclinae have been recorded from Denmark. *Thecla betulae* L. follows the sloe and flies in August. *Quercusia quercus* L. is distributed among oak all over the country and is often numerous. *Nordmannia ilicis* Esper is a very rare and local species, found in a few places in Jutland near the city of Randers. *Strymonidia pruni* L. has been recorded from central Seeland and Lolland, but is also a very rare species and flies in July. *S. w-album* Knoch is more numerous and is generally distributed. *Callophrys rubi* L. is generally distributed all over the country, but is absent from Bornholm.

We have eleven species of Hesperidae. *Pyrgus malvae* L. is found in most parts of Denmark in May and June. *P. armoricanus* Obth., which flies in May and August, is locally distributed in the north-western parts of Seeland, especially near the coast and on Bornholm. Then there is the very doubtful species *P. serratulae* Rbr., with only two specimens recorded in 1908-09 from Jutland and Lolland, but the specimen from Lolland belongs to the alpine form. *Erynnis tages* L. is rather common, especially in Northseeland in May-June, but has not been recorded from Bornholm. Of *Carterocephalus palaemon* Pall. there have been only two specimens recorded from Bornholm in 1954, both of which are very doubtful. *C. silvicolus* Meig. was first discovered in 1941, and is now numerous in a few woods in Lolland. Also taken in Lolland as well as in Falster is the extremely rare *Heteropterus morpheus* Pall., which has been caught about a dozen times since 1939, especially in Roden skov in Lolland, but it is several years since we last heard of its capture. *Thymelicus lineola* Ochs. is generally distributed in July and August. *T. sylvestris* Poda is only found west of Storebaelt, i.e. in Jutland and on Funen, where it is just as common and widespread as *T. lineola*. *Hesperia comma* L. is a rare butterfly found only in a few places, but most commonly on Bornholm and on Seeland, in July-August. *Ochlodes venatus* Brem. & Grey is generally distributed.

ORTHOSIA OPIMA HUBN. AND LYGRIS PRUNATA L. IN WARWICKSHIRE, 1975. — I took two male *Orthosia opima* in my garden trap at Hampton Wood on the 22nd and 26th of April. I know of only one other record of this species for the county: E. A. Laxon's capture of four specimens at Kenilworth in 1899. On the 4th August, a single *Lygris prunata* L. came to my Hampton Wood trap, and the first Warwickshire *prunata* to my knowledge. — A. F. J. GARDNER, "Willows End", 29, Charlecote, Warwickshire.